

Name _____ Date _____ Hour _____

Learning Set 2: The Sandwich-Cookie Challenge



2.4 Investigate

Identify Criteria and Constraints



Based on the new procedure, identify the criteria and constraints for the investigation.

Criteria	Constraints

Run Your New Procedure *(Read this section on p. 32 with your partner.)*

As you run your investigation, record your results below.

Communicate Your Results *(Read this section on p. 32 with your partner.*

Be ready to share your data.)

As the data is shared with the class, record the class data on your “Drops on a Penny” line plot.



Analyze Your Data

Look at the line plot and your written procedures to answer the following questions.

1. *How do the results from this investigation compare to the ones from your first set of trials?*
2. *Did you have any problems (mistakes, spills, etc.) during the tests? List them.*
3. *Did all groups get results similar to yours?*
4. *Do you trust these results more? Why or why not?*



Revise Your Procedure: Stop to read and discuss this section with your class.

Are the results consistent?

If so, why?

If not, how could we improve the procedure?

Reflect After your class creates the second graph, answer the following questions:

1. *What did the distribution, or spread, of data points on your latest line plot look like? What do you think this says about how precise your lab has been at determining the answer to the cookie company's question?*

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2. *Do you think it would ever be possible, given the materials and conditions you have in the classroom, to find an exact answer? Why or why not?*

3. *What do you think it would take to find an exact answer?*

What's the Point? *Read through this section at the bottom of p. 33.*

What does this lesson teach you about how scientists work together to solve a problem?